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Third-Person Effect, Gender Differences, Pornography Exposure and Support for Restriction of Pornography

The interrelationship of the factors that influence attitudes in support of restrictions on pornography are explored in this study. From data gathered in a survey of Taiwanese high school students, a model is constructed to depict these relationships. Although both male and females subjects perceived pornography to have greater negative influence on others than on themselves, females who had a lower level of past exposure to pornography perceived greater negative effects of pornography on others than did male respondents. Findings also supported the hypotheses that gender, lower level of past exposure and perceived negative effects all are related to an attitude that favours control of pornography.

alls for restriction on pornography are often politically expedient because popular sentiment links sexually explicit media with contemporary social problems such as rape, child abuse, and violence. Cultural and religious values have often viewed lascivious and prurient media as taboo. In opposition to legal restrictions are strong commitments to freedom of expression and an as yet unproven cause and effect link between exposure to pornography and anti-social or criminal behaviour.

Social scientists have been intrigued by research that seeks to identify the demographics and life experiences associated with attitudes favouring control of media messages. Davison (1983) first identified the third-person effect, which describes the perception that media exert greater persuasive influence on others than on

self. This perception has been labelled the perceptual-bias component of the third-person effect (McLeod et al., 1997; Perloff, 1993). However, when people believe that there is a harmful media effect the logical follow-up question is will they then wish to restrict messages that they believe to be harmful to others. More recent studies have focused on this behavioral component that predicts third-person perceptions will lead to support for media restrictions on press coverage of criminal trials (Salwen & Driscoll, 1997), pornography (Gunther, 1995; Rojas et al., 1996), sensitive television content (Gunther & Hwa, 1996), violence on television (Hoffner et al., 1999; Rojas et al., 1996; Salwen & Dupagne, 1999) and negative political advertising (Rucinski & Salmon, 1990). All of these topics have been on the public agenda because of proposed legislation to curtail or forbid these media depictions seen as harmful or negative.

Much of the research on third-person perceptual and behavioural effects has computed the mean difference between first-person effects and third-person effects, a variable labelled magnitude of perceptual bias (Gunther, 1995; McLeod et al., 1997; Rojas et al, 1996). However, recent studies (Lo & Paddon, 1998; Lo & Wei, 2000) demonstrated that in examining pro-censorship attitudes, the magnitude of perceptual bias was not a reliable measure to determine pro-censorship attitudes, the behavioural-effect part of the third-person effects model, because it does not distinguish between those who perceive pornography to have high influence on themselves and on others and those who perceive pornography to have low influence on themselves and on others. Thus, this study proposes to use both perceived effects on self and perceived effects on others as predictors of support for restriction of pornography.

Research support for the third person perceptual bias has been consistently robust (Perloff, 1999). However, it seems that the relationship of this perceptual bias to attitudes in support of media restriction depends on the perceived harm and its interaction with other variables. Gender is one of the variables that earlier studies of pornography have found associated with stronger procensorship attitudes (Lee & Yang, 1996; Thompson et al., 1990). Social psychologists have found that women are more likely to support restrictions on pornography (Thompson et al., 1990) and also to be less likely to have had exposure to pornographic material (Dines et al., 1998; Lo et al., 1999; Wilson & Abelson, 1973). Therefore, in this study we propose that gender and exposure to

pornography are related to perceived effects on self and others and a resulting attitude in support of censorship. The purpose of this study is to construct a conceptual model that explains the theoretical links among perceived effects on self and others, gender, exposure, and attitudes supporting restriction of pornography.

■ The regulation of pornography in Taiwan

When studying attitudes toward sexually explicit media in Taiwan, the centuries-old Chinese cultural context as well as the recent influences of Western, including Japanese, print and video must be considered. Comparison between what is labelled pornography in Taiwan and the West must be viewed with caution by researchers. Chinese traditional literature has often featured erotic themes (He, 1996) and there are even centuries-old drawings of sexual acts (Brewer, 1982). But Confucian concepts of proper family life, filial piety and the correct behaviour of the young has tended to sequester and accept this material as art, historical artifact and literature and not judge it by the same standards as contemporary materials.

Other realities are that technology, the new press freedom that followed the lifting of martial law in 1987, and international entertainment distribution systems have rendered the laws obsolete. For example, the regulations in the Publication Law enacted in 1973 label as obscene photographs that show genitals or female breasts. Sexually oriented R-rated material is banned from broadcast television, but that policy was instituted before the advent of cable. Slick pornographic magazines were generally not available until Chinese editions of Playboy and Penthouse appeared in the 1990s, although Japanese adult comic books have long been popular in Taiwan, with no age constraints. News vendors displayed a US edition of Playboy showing full frontal nudity of women alongside an edition from Japan with pubic hair airbrushed out, and also displayed would be a third version, in Chinese, showing only upper body nudity. The Taiwan High Court ruled in 1997 that the Chinese edition of Penthouse magazine was not legally obscene. Since that ruling, Chinese editions of Penthouse and Playboy are sold at Taiwan bookstores or by street vendors. What can and cannot be censored on obscenity grounds remains far from clear.

The first video cassette recorder was imported into Taiwan as

recently as 1976 (Qiu, 1984) and the number of VCRs has increased dramatically from 3.75 per cent penetration in 1981 to 71.16 per cent by 1992 (DGBAS, 1995). Video rental shops proliferated and became the major source of pornographic films. Private ownership of video tapes of R-rated or X-rated films that show male or female genitals is illegal. However, it is easy to find the tapes available for viewing in small rooms of video shops or in entertainment districts. In a study of the video tape business (Wang et al., 1989), it was found that 93 per cent of operators of the video shops admitted that they provided pornographic films under the counter. VCR use declined rapidly after 1993, when the government passed the Cable Television Law to legalize the cable television industry. Pornographic materials are readily available on cable channels, and some channels showed such films before cable was regulated.

Under the cable television law, sexually explicit films or programs (lower body nudity shown as mosaic or sprayed) may be shown from midnight to 5am on general channels and may be presented any time on special channels, accessed through decoding devices. Mainstream movie theatres may show sexually oriented R-rated films, but persons under age 18 are not admitted. Furthermore, X-rated movies are widely available, regardless of age, in rural theatres and in video rental shops where supervision is lax.

Government restrictions prohibit Taiwanese high school students under 18-years-of-age from watching sexually oriented R-rated films shown after midnight on cable TV, and forbid rental or purchase of pornographic films and publications, but enforcement is difficult, and recent studies (Lo et al., 1999) indicate that a majority of high school students have had access to pornographic materials forbidden by the government.

In Taiwan and for use in this study, 'pornography' includes R-rated and X-rated films on cable television, in a theatre, on rented VCR films, adult magazines, books and comic books. It should be noted further that the majority of pornographic materials available to adolescents in Taiwan are produced in the United States, Japan, Europe and Hong Kong, in that order. Local products in Chinese are limited (Wang et al., 1989). In Taiwan's exploding media mix, foreign products and images clash with traditional tendencies and behaviour. How public policy is crafted to deal with these issues is an important question. Can cultural and social values be preserved while supporting democratic values and freedom of expression?

■ Review of the literature and hypotheses

□ Third-person perception: The perceptual component

The perceptual component of Davison's (1983) third-person hypothesis, which states that people tend to perceive media messages to have a greater impact on others than on themselves, has proved to be a useful heuristic tool to identify the variables that result in the perception that a message will have negative effects. In a recent review of published articles, Perloff (1999) reported that every paper that has directly tested the third-person effect has found support for the perceptual component of the hypothesis. In fact, recent research has found that third-person effects are even stronger when the communication is seen as socially less valuable or damaging: rap music (McLeod et al., 1997); press coverage of the O. J. Simpson trial (Salwen and Driscoll, 1997); controversial advertising content (Shah et al., 1999) and violence on television (Hoffner et al., 1999; Rojas et al., 1996; Salwen & Dupagne, 1999).

Several studies on pornography have found that a majority of respondents tend to perceive others to be more negatively influenced by pornographic materials than themselves (Gunther, 1995; Lee & Yang, 1996; Rojas et al., 1996). Research conducted in Taiwan also indicated that both males and females perceived pornography to have a greater negative influence on others than on themselves (Lo & Paddon, 1998). Based on these research findings, we predicted the following:

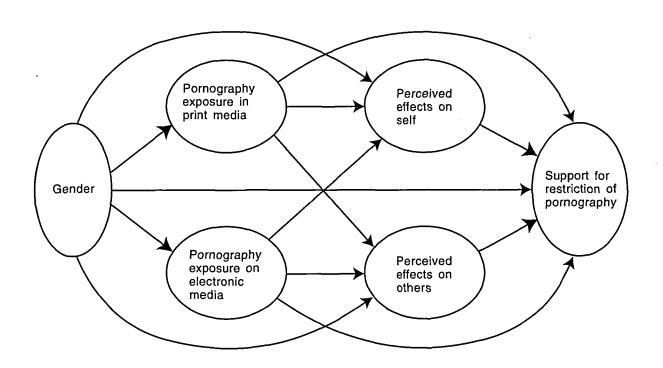
H1: Both male and female respondents will perceive pornography to have a greater negative influence on others than on themselves.

■ Gender, exposure, third-person perception and support for restriction

The next logical question for research to explore is when does this perception of negative effects from a communication result in a behavioural action—support for censorship. In this study, we developed a model to reflect the relationships among gender, pornography exposure, perceived effects on self and others, and support for restriction of pornography. Figure 1 depicts an hypothesized model that attempts to predict support for restriction of pornography. The figure shows that gender will predict pornographic

Ven-hwei Lo and Anna Paddon

Figure 1
Proposed path analysis model of third-person effect



media exposure, which in turn will predict both perceived effects on self and others, which will predict support for restriction of pornography.

These proposed direct and indirect relationships may be described in a series of hypotheses. First, we proposed that gender would have a direct effect on pornographic media exposure. Even though psychological studies of the differing arousal effects of pornography on males and females have been inconclusive, researchers have consistently found that females are more likely than males to label erotic and sexually explicit material pornographic, and to have had less exposure to this type of media (Kenrick et al., 1980). Fisher and Byrne's (1978) experiment, like several other earlier studies, found that women's self-reports about arousal response to erotic material was the same as men but they concluded that the cultural and social constraints deterred female use and accounted for the favouring of laws against it. In a US nationwide survey, Wilson & Abelson (1973) reported that 84 per cent of men compared with 69 per cent of women said they had been exposed to one or more kinds of pornographic material. More men (52 per cent), compared to women (37 per cent) also told researchers that they had seen pictorial depictions of an explicit sexual nature in the two years prior to the interview. In a more recent study, Thompson et al. (1990) found that men were three times more likely than women to watch X-rated or sexually explicit movies on pay TV, on VCRs or in theatres. Therefore, it is hypothesized that:

H2: Female respondents will have lower levels of exposure to pornographic media than male respondents.

Second, we proposed that gender would be related to perceived effects of pornography on self and others. This expectation is based on previous research findings on pornography. In pornographic media, women are routinely depicted as objects or treated as less than human by their sexual partners (Dines et al., 1998; Dworkin, 1989). Women are also presented in situations that are degrading, humiliating, and subjugating (Dworkin, 1998). Effects that women foresaw ranged from 'Make People Sex Crazy' and 'Lead People to Lose Respect for Women', to 'Lead to a Breakdown of Morals' and 'Lead People to Commit Rape'.

Because pornography is degrading to women who are presented as sexual objects or a sexual commodity who enjoy pain or humiliation (Dworkin, 1998), viewing pornography was found to make women more tense, anxious, angry, and hostile (Senn, 1993).

Wilson and Ableson's (1973) study found that women were more likely than men to associate pornography with negative effects. Women also were less accepting of the arousal and entertainment values of these materials. Thiessen (1994) also noted that women express negative affect toward the use of pornography and are also less willing to volunteer for studies of erotica. Kendrick, et al., (1980) found that not only were females more likely to choose a soft-core film rather than a hard-core erotic film, but if given the additional choice, females were, compared with males, more likely to decline participation completely. The researchers conclude that the greater negative affective reactions would seem to both result from and in turn contribute to the lower exposure rates of women. In addition, past research indicates that women tend to have less favourable attitudes toward pornography (Greenberg et al., 1993; Malamuth, 1996). Exposure to pornography also increases acceptance of violence against women (Linz et al., 1984; Malamuth & Check, 1981) and contributes to men's acceptance of rape myth (Allen et al., 1996). Therefore, it is hypothesized that:

H3: Female respondents will be more likely to perceive greater negative effects of pornography on themselves and others than male respondents.

Third, we proposed that exposure to pornography would be negatively associated with perceived effects on self and others. Although little evidence has been produced to support the relationship between pornography exposure and perceived effects of pornography on self as well as others, it seems plausible that higher exposure will be correlated with less perceived effect of pornography on self and others.

This expectation is based on past studies, which show that respondents with greater exposure to television violence were less concerned about the harmful effects of television violence on society (Donnerstein, Slaby, & Eron, 1994; Hoffner et al., 1999) and were less willing to support censorship of such content (Hoffner et al., 1999). Past studies also found that heavy viewers might experience desensitization, becoming less responsive to the violence in the film than the light viewers (Cline et al., 1973; Donnerstein et al., 1994). Fisher et al. (1994) reported that respondents with less exposure to pornography were more concerned about the harmful effects of pornography. In two experimental studies, Malamuth and Check (1980, 1981) found that subjects exposed to a positive rape portrayal were less negative in their responses

to a second rape portrayal. In addition, Eveland, Nathanson et al. (1999) found that the perceived likelihood of exposure was a powerful predictor of perceived impact of violent rap and violent action adventure movies on others. It seems reasonable to expect that adolescents who have a higher level of exposure to pornography might think that pornography had relatively less influence on themselves and others. Thus, we predicted the following:

H4: Those who have had a higher level of exposure to pornographic media will perceive fewer negative effects of pornography on themselves and others.

Fourth, we propose that females are more likely to support restriction of pornography. This expectation is also based on previous research findings on pornography. Widely discussed books, Dworkin's (1989) Pornography: Men Possessing Women and MacKinnon's (1993) Only Words, have supported the feminist agenda against pornography. Because pornographic materials depict women in scenarios of degradation, injury, abasement, or torture (Dines et al., 1998), women not only view less erotic media, but they also told survey researchers that they are more willing to seek restrictions on it. In their development of an Attitudinal Censorship Questionnaire, Hense and Wright (1992) found that although no gender differences were found on the General Censorship factor, females were more willing to censor pornography than were males. Thompson et al., (1990) found that women were more supportive than men of anti-pornography legislation. Lee and Yang (1996) also found that females were more likely than males to support censorship of sexual violence and sexually explicit materials on television. Based on these research findings, we predicted that:

H5: Female respondents will be more likely to support restriction of pornography than male respondents.

There is also evidence that pornography exposure is negatively related to support for restriction of pornography. Earlier studies found that those who have higher exposure to pornography tend to oppose its restriction (Howard, Reifler & Liptzin, 1970). Recent studies also indicated that those who had less exposure to sexually explicit materials were more likely to support regulation of pornography (Gunther, 1995; Lee & Yang, 1996; Thompson et

al., 1990). Thus, it is hypothesized that:

H6: Those who have had a higher level of exposure to pornography will be less likely to support restriction of pornography.

Finally, we proposed that perceived effects of pornography on self and others will be positively associated with support for restriction of pornography. Most of the previous studies that examined the behavioural component of the third-person effect used magnitude of perceptual bias, or the magnitude of the difference in perceived effects on self and perceived effects on others, as a predictor of support for media restrictions (Gunther, 1995; McLeod et al., 1997; Salwen & Driscoll, 1997). As Lo and Paddon (1998) demonstrated, the magnitude of perceptual bias is not a reliable predictor of support for restriction of pornography because it does not distinguish between those who perceive pornography to have a high influence on themselves and on others and those who perceive pornography to have low influence on themselves and on others. Instead, they proposed that both perceived effects on self and perceived effects on others be examined to identify more relevant predictors of censorship attitudes than the magnitude of perceptual bias.1

Furthermore, most of the past research suggests that it is the perceived effects on others that motivates people to support media restrictions (Cohen et al., 1988; Gunther, 1991; Gunther, 1995; McLeod et al., 1997). Salwen (1997) found that perceived effects on others was positively related to support for restrictions on unfair election-news coverage. In addition, several previous studies also indicate a positive relationship between perceived effects of media messages on self and support for restriction of media. For example, Lee and Yang (1996) found that perceived effects on self was an important factor in predicting support for pornography restrictions. Gunther (1995) also found perceived effect on self was positively related to a pro-censorship attitude. In the light of these considerations, we predicted that:

H7: Both perceived negative effects of pornography on self and perceived effects on others will be positively associated with support for restriction of pornography.

^{□ 1.} In this study, the correlation between the magnitude of perceptual bias and support for restriction of pornography is 0.02 (p>.05).

■ Method

Subjects for this study were drawn from 15 randomly selected high schools in Taipei, Taiwan. Three classes were randomly chosen from each school. The self-administered questionnaires were distributed in classes during a two-week period in December 1996. Respondents were assured of anonymity and confidentiality. The total completed sample was 1,854, consisting of 960 (51.8 per cent) males and 894 (49.2 per cent) females. Of the respondents, 642 (34.6 per cent) were in Grade 10, 638 (34.4 per cent) in Grade 11 and 574 (31.0 per cent) in Grade 12. Questionnaires were distributed and instructions given by trained senior undergraduate students from a large national university.

Table 1
Principal component factor analysis of self and others items (varimax rotation)

	Factor Loading			
Item	Factor 1	Factor 2		
Sexual attitudes: others	0.88	0.21		
Sexual knowledge: others	0.84	0.20		
Sexual behaviour: others	0.83	0.21		
Attitudes toward the opposite sex: others	0.82	0.25		
Moral values: others	0.80	0.22		
Sexual attitudes: self	0.22	0.85		
Sexual knowledge: self	0.21	0.84		
Sexual behaviour: self	0.21	0.80		
Attitudes toward the opposite sex: self Moral values: self	0.22 0.17	0.72 0.71		
Eigenvalues	5.25	1.78		
Variance explained	52.5%	17.8%		
Total percent of variance	70.3%			
Cronbach's alpha	0.91	0.87		

■ Measurement of variables

☐ Perceived effects on self and others

To measure perceived effects on self, respondents were asked to rate separately the likely influence of pornography on their own moral values, attitudes toward the opposite sex, sexual knowledge, sexual attitudes and sexual behaviour. The measurement of perceived effects on others consisted of the same five items re-worded to refer to other high school students by replacing 'my own' with 'other high school students'. Respondents were instructed to estimate influences on the following 5-point scale: (5) a large negative influence; (4) a small negative influence; (3) no influence at all; (2) a small positive influence; (1) a large positive influence.

Principal component analysis was performed to determine whether the self and others items would measure two different underlying dimensions. The results showed that the self and other items were clearly grouped in two factors and measured two underlying dimensions (see Table 1). The two-factor solution explained 70.3 per cent of the total variance. The five 'self' items were added and divided by five to create an index of 'perceived effects on self' (Cronbach's alpha=0.87, M=2.97, SD=0.82). The five 'others' items were also added and divided by five to constitute an index of 'perceived effects on others' (Cronbach's alpha=0.91, M=3.44, SD=0.92).

□ Support for restrictions on pornography

Support for restrictions on pornography was measured with a fouritem index. Respondents were asked to indicate their agreement (5=strongly agree, 1=strongly disagree) with a government legislation to ban R-rated pornographic films or programmes, X-rated pornographic films or programmes, pornographic publications and pornography on computer or CD Rom.

Principal component analysis showed that the four items were grouped in a single factor and measured the same underlying concept. The one factor solution explained 78 per cent of the total variance (Eigenvalue=3.12). A measure of support for restrictions on pornography was created by adding the four items and dividing the sum by four (Cronbach's alpha=0.91, M=3.15, SD=1.08).

□ Exposure to pornographic media

A list of nine pornographic media was provided, and respondents were asked how often they had seen each of them in the last one or two years. The response categories were: never (0), once or twice per year (1), once or twice per month (2), once or twice per week (3), and nearly every day (4). Exposure means were computed for each medium. Thus, the higher the score, the more frequent the exposure to that medium.

A set of pornographic media exposure indices was constructed using principal component analysis. The nine pornographic media exposure items yielded two factors (Table 2). The two-factor solution explained 62.4 per cent of the total variance. Items 1–6 loaded on the first factor. A measure of 'pornography exposure on electronic media' was created by adding items 1–6 and dividing the sum by six (Cronbach's alpha=0.82, M=0.54, SD=0.63). Items 7–9 which loaded on the second factor constituted a measure of 'pornography exposure in print media'. The items were added and divided by three (Cronbach's alpha=0.85, M=0.61, SD=0.80).

Table 2
Principal component factor analysis of pornographic media exposure

Item	Factor 1 Electronic Media	Factor 2 Print Media	
X-rated films at a theatre	0.80	0.12	
X-rated rental films	0.74	0.34	
R-rated films at a theatre	0.73	0.12	
R-rated rental films	0.68	0.37	
R-rated films or programmes on CA	TV 0.52	0.43	
Sexually explicit films on special			
channels of CATV	0.51	0.45	
Pornographic magazines	0.19	0.87	
Pornographic comics	0.18	0.83	
Pornographic books	0.32	0.78	
Eigenvalues	4.51	1.11	
Variance explained	50.1%	12,3%	
Total percent of variance	62.4%		
Cronbach's alpha	0.82	0.85	

■ Results

☐ Paired t-tests

A series of paired t-tests were conducted to test the first hypothesis which predicted that both male and female respondents will perceive pornography to have a greater negative influence on others than on themselves. As expected, a majority of male (57.8 per cent) and female (64.6 per cent) respondents perceived others to be more negatively influenced by pornography than themselves. Only 11.4 per cent of males and 9.9 per cent of females perceived more negative influence on themselves, and 30.8 per cent of males and 25.5 per cent females perceived no difference in influence. The results of paired t-tests supported the existence of third-person effects for both male and female respondents. As shown in Table 3, both males and females perceived pornography to have a greater negative influence on others than on themselves in both the individual items and the combined effect index. H1 was supported.

Table 3
Mean estimates of influence
of pornography on self and others

Items	N	Self	Others	t-value
All	1853	2.97 (0.82)	3.46 (0.96)	27.10*
Males	960	2.83 (0.79)	3.29 (0.96)	17.92*
Females	882	3.11 (0.82)	3.65 (0.92)	20.49*

Figures in parentheses are standard deviations. * p<0.001

Path analysis

In order to examine the tentative causal relationships among gender, perceived effects on self and on others, exposure and support for restriction of pornography, a path analysis was conducted to test the model proposed in Figure 1. The analysis consists of five

^{□ 2.} Multicollinearity could cause trouble. We regressed each variable (in Figure 2) on all other variables to examine the resulting R Square values and the tolerance values. No support for the existence of multicollinearity was found in the five standard regression analyses.

standard regression analyses.² In the first two regression analyses, the two indices of pornographic media exposure were regressed on gender. This analysis examined H2 which predicted females are more likely to have a lower level of exposure to pornography than males. The analyses revealed that gender was a powerful predictor of exposure to pornography on electronic media (Beta=0.39, p<0.001, F=261.64, p<0.001, R²=0.13) and exposure to pornography in print media (Beta=0.36, p<0.0001, F=323.16, p<0.001, adjusted R²=0.15). As expected, females had a significantly lower level of exposure to pornography than males. H2 was supported.

In the third and fourth regression analyses, perceived effects on self and perceived effects on others were regressed on gender and the two pornographic media exposure indices. The third regression examined H3 which predicted that females are more likely than males to perceive greater negative effects of pornography on themselves and others. The fourth regression analysis tested H4 which predicted the level of pornography exposure would be nega-

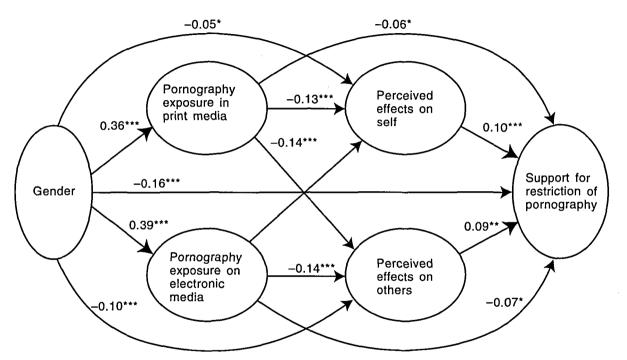
Table 4
Zero-order correlations between gender, pornography exposure measures, perceived effects on self and others, and support for restriction of pornography

		1	2	3	4	5	6
1.	Gender		_			_	
2.	Pornography exposure in print media	.36***					
3.	Pornography exposure on electronic media	.39***	.61***				
4.	Perceived effects on self	18***	27***	29***			
5.	Perceived effects on others	21***	26***	27***	.65***		
6.	Support for restriction of pornography	24***	21***	22***	.23***	.22***	•
7.	Magnitude of perceptual bias	05*	28***	.53***	01	00	.02

Variable coded, or recoded, as follows: gender (0= female, 1= male); pornography exposure ranged from (0= never to 4= nearly everyday); perceived effects on self and others ranged from (1= a large positive influence to 5= a large negative influence); support for restriction of pornography ranged from (1= strongly disagree to 5=strongly agree).

^{*} p<0.05; *** p<0.001

Figure 2 Results of path analysis: Standardized betas



Variable coded, or recoded as follows: gender (0=female, 1=male); pornography exposure ranged from (0=never to 4=nearly everyday); perceived effects on self and others ranged from (1=a large positive influence to 5=a large negative influence); support for restriction of pornography ranged from (1=strongly disagree to 5=strongly agree). * p<0.05; ** p<0.01; *** p<0.001

tively associated with perceived negative effects of pornography on self and others. The analyses indicated that gender was a significant predictor of perceived effects on self (Beta=-0.05, p<0.05) and perceived effects on others (Beta=-0.10, p<0.001). H3 was supported (F=67.37, p<0.001, adjusted $R^2=0.10$). The results of the analyses also revealed that the two pornographic media exposure indices were negatively associated with perceived effects on self and perceived effects on others (F=62.02, p<0.001, adjusted R²=0.09) indicating those who have had a higher level of exposure to pornography on electronic media tend to perceive less negative effects of pornography on themselves (Beta=-0.19, p<0.001) and others (Beta=-0.14, p<0.001). It also indicated that those who have had higher level of exposure to pornography in print media tend to perceive less negative effects of pornography on themselves (Beta=-0.13, p<0.001) and others (Beta=-0.14, p<0.001). H4 was supported.

The fifth regression analysis regresses the variable of support for restriction of pornography on gender, the two pornographic media exposure indices, perceived effects on self and perceived effects on others. This analysis examined H5, H6 and H7. As shown in Figure 2, gender was negatively associated with support for restriction of pornography (Beta=-0.16, p<0.001) indicating females were more likely to support the restriction of pornography. The analysis also shows that both pornographic media exposure indices were negatively associated with support for pornography restriction, indicating that those who had a higher level of exposure to pornography on electronic media were less likely to support its restriction (Beta=-0.07, p<0.05). It also revealed that those who had a higher level of exposure to pornography in print media were less likely to support its restriction (Beta=-0.06, p<0.05). Figure 2 also indicates perceived effects on self (Beta=0.10, p<0.001) and perceived effects on others (Beta=0.09, p<0.01) were significant predictors of support for restriction of pornography. The results of the analyses revealed that H5, H6 and H7 were supported (F=44.13, p<0.001, adjusted R2=0.11).

■ Discussion

The results of this study clearly indicate that most male and female respondents perceive pornography to have a greater negative influence on others than on themselves. Such a finding is consis-

tent with Davison's third-person effect hypothesis. The results of the study also support the proposed model in Figure 1. They suggest a causal relationship exists among gender, pornography exposure, perceived effects on self and others and support for restriction of pornography. As expected, gender is fairly strongly related to pornography exposure, which in turn, is related to perceived effects on self and others, which in turn, are related to support for restriction of pornography.

Perhaps the most important contribution of this study is to show gender is related to both perceived effect on self and perceived effect on others. Our study demonstrates that females are more likely than males to perceive greater negative effects of pornography on self and others. Because pornography is produced and used primarily by men (Dines et al., 1998; Lin 1999) and exposure to pornography promotes insensitivity toward victims of sexual violence and contributes to men's sexual callousness toward women (Zillman & Weaver, 1989), it is reasonable to expect that females would be more likely than males to perceive pornography to have greater negative effects on other males than on other females. Unfortunately, this study did not include perceived effect on other males and perceived effect on other females. Therefore, more studies are needed to examine the relationships between gender, pornography exposure and perceived effect of pornography on other males and females.

Another contribution of this study is to show that both perceived effects on self and perceived effects on others are positively related to support for restrictions on pornography. The results of this study provide evidence for a linkage between the perceptual and behavioural components of the third-person effect. It seems that individuals who perceive the media content as having a greater negative influence on themselves and on others will be more likely to support media restriction. Our study proposes a rather complex theoretical relationship between the perceptual and behavioural components. Clearly, the theoretical relationship among perceived effects on self, perceived effects on others, and support for media restriction merit further research. Future work is needed to determine conditions under which perceived effects on self and perceived effects on others may or may not be related to support for media restrictions.

The present study also makes a contribution to the literature on third-person effects by demonstrating that pornography exposure leads to less perceived negative effects of pornography on self and others. This suggests that adolescents with greater exposure to pornography might experience desensitization, becoming less concerned about the harmful effects of pornography. This finding is consistent with previous research findings (Donnerstein et al., 1994; Hoffner et al., 1999). Future research may replicate this study in different countries and on different topics such as news coverage, voting behaviour, political advertising or media violence.

For the government authorities, which set communication policy, this study has important implications. Because the perception of more harmful effects on others is significantly related to support for censorship, part of that support is based on an erroneous assumption. Opinion polls are likely to report inflated negative attitudes about the effects of pornography and stronger support for governmental restrictions (Linsley, 1989).

Another point to consider is that it is facile to reason the perceived negative effect of pornography on self does not have to be a public policy concern because those who feel reading or viewing it is harmful can simply avoid purchasing it and can avert their eyes. Industry has cooperated, in some cases reluctantly, with this solution by agreeing to warning labels and rating systems. However, research subjects who respond that pornography has a negative effect on self may be expressing a sense of physical or relational vulnerability when pornography is consumed by others rather than a sense that their own internal mental or emotional well-being is at risk. For example, when a female subject responds that pornography has a negative effect on self, she may not be referring to a personal feeling of vulnerability. She may have experienced aggressive behaviour from someone known to be a user of pornography or she may have heard of others who have been victimized by users of pornography. Any third-person effect study that looks only at the perceptual difference between first and third person effects and ignores the perceived effect on self will miss an important variable. Future researchers should word questions to distinguish between these two types of perceived effects on self—the personal, emotional/mental feeling effect and the hypervigilance or feeling of vulnerability effect that is a result of pornography being available in the community, but is clearly an effect on self. The kinds of effects perceived by those who say there are effects from pornography on self need further exploration.

Also, this study found that women and those who have avoided pornography in the past, either because of choice or lack of opportunity, are most likely to be those who perceive a greater negative effect on self and on others and to support restrictions on sexually explicit media. These are also the same research subjects who social psychologists previously identified as most reluctant to participate in studies dealing with exposure to pornography and questions about it (Kenrick et al, 1980). This complicates study of their attitudes, media use and its effects.

In spite of difficulties with research design and objectivity, Byrne & Kelley (1989) make a reasoned call for investigation of pornography's effect. They write, 'The accumulation of consistent findings in multiple investigations by different investigators holding different biases, using different methodologies, across quite varied samples, measuring a variety of behaviours in a variety of ways, can eventually lead to a widely accepted conclusion that may warrant societal action' (p. 367). Those with a commitment to both freedom of expression and media responsibility should continue to engage in research that explores the issues of availability and effects of sexually explicit media messages. Media consumers and those who shape public policy in this area should also demand rigorously designed and implemented studies, not easy answers or politically expedient solutions.

It should be noted, however, that in spite of the label, 'behavioural effect', this study has not measured behaviour. What we really have measured is attitude. Further researchers should extend this research to measure behaviour—the actions initiated by persons who seek to initiate legislation or public policy initiatives to control the media available to others.

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